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## (54) Desks and fitments

(57) A desk unit has, below its top (12), a first part (14) at or inset from one edge of the top and a second part (16) extending across the width of the desk at or inset from an opposite edge of the top. A subsidiary unit (20) parts (48, 50) for engaging said first part (14) so that the subsidiary unit (20) can be swung up into position below the desk top (12) and secured in place (28, 30) by way of said second part (16).

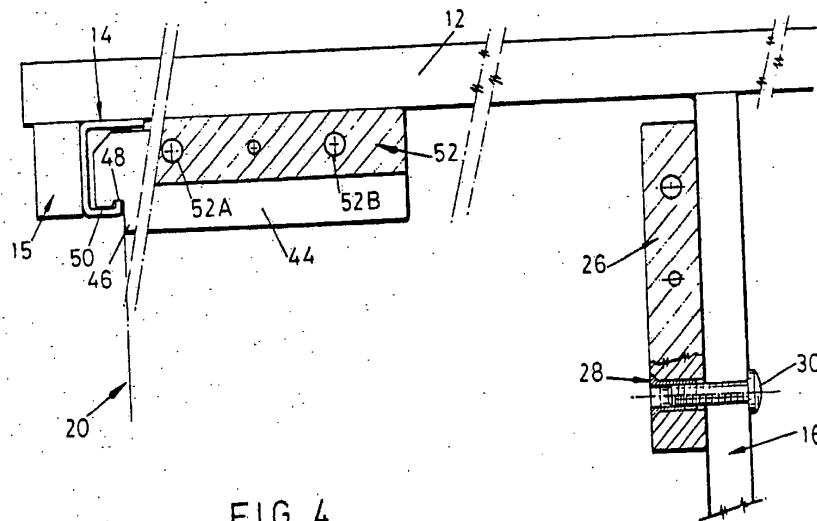


FIG. 4

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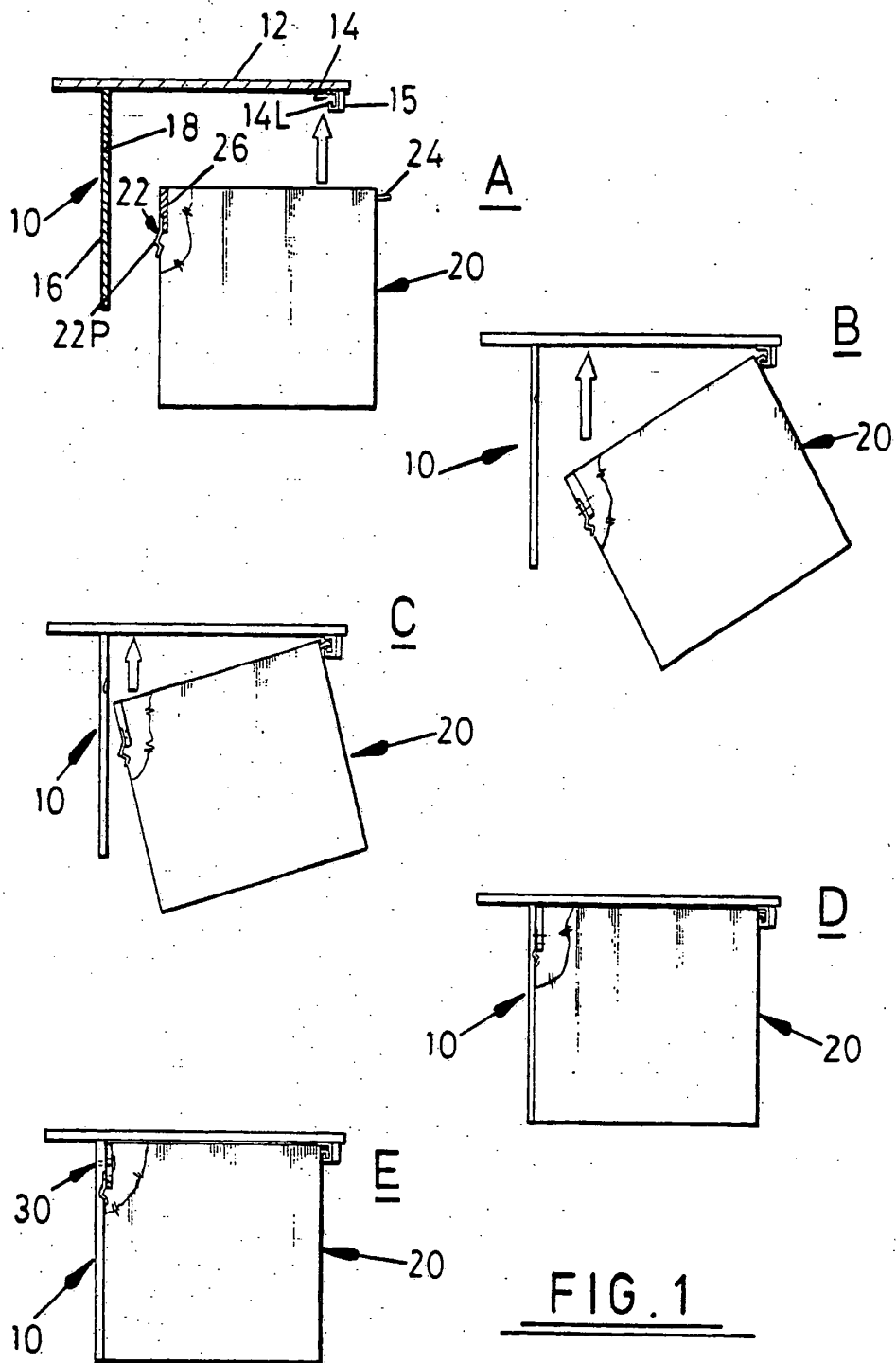
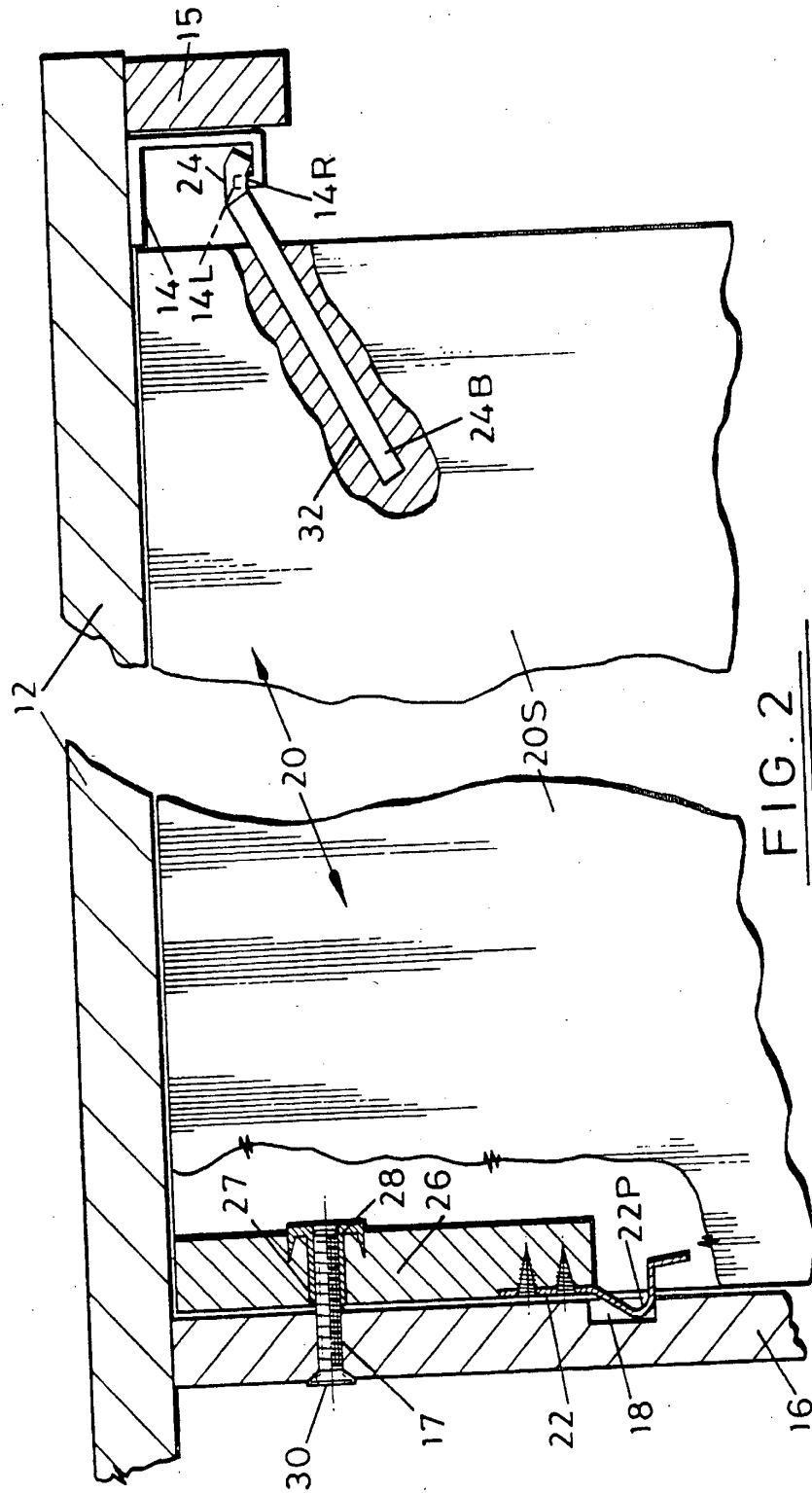
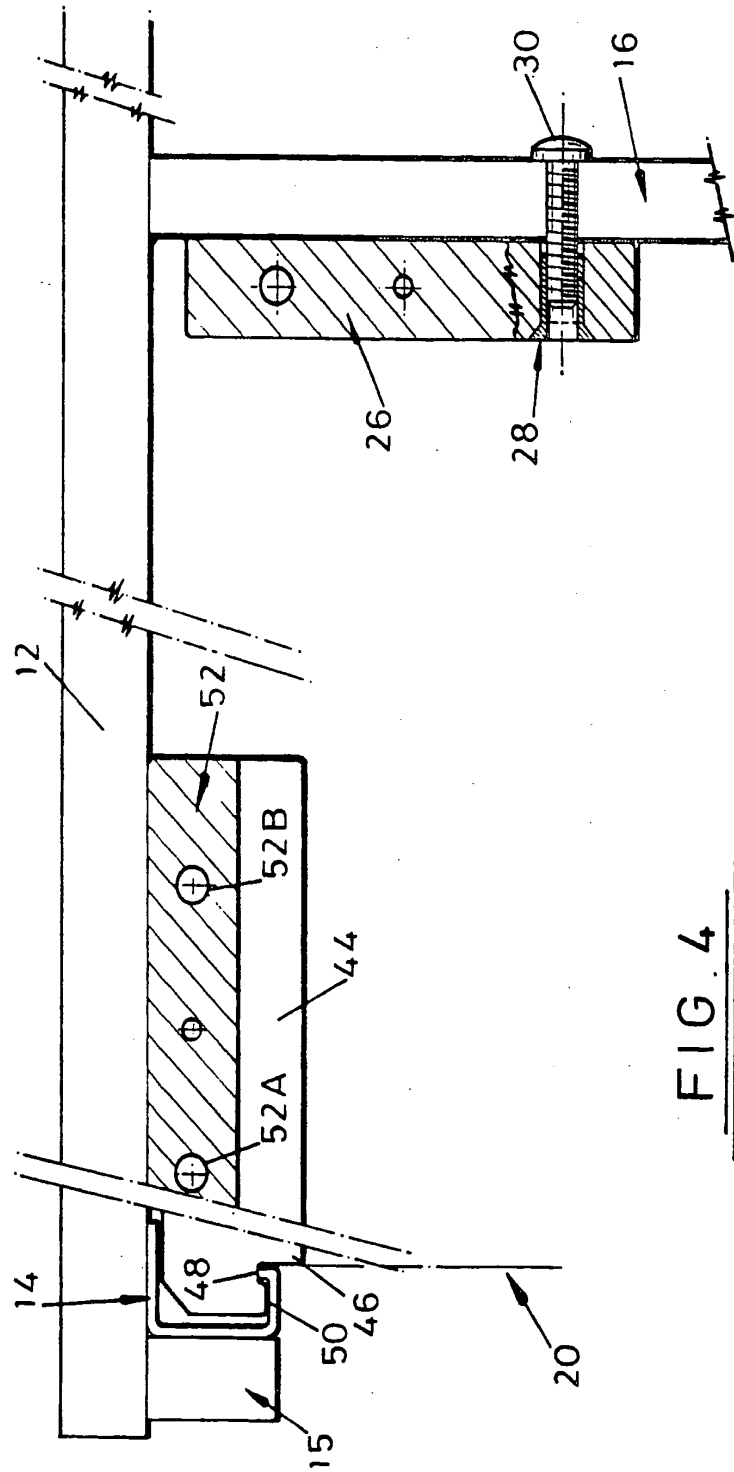
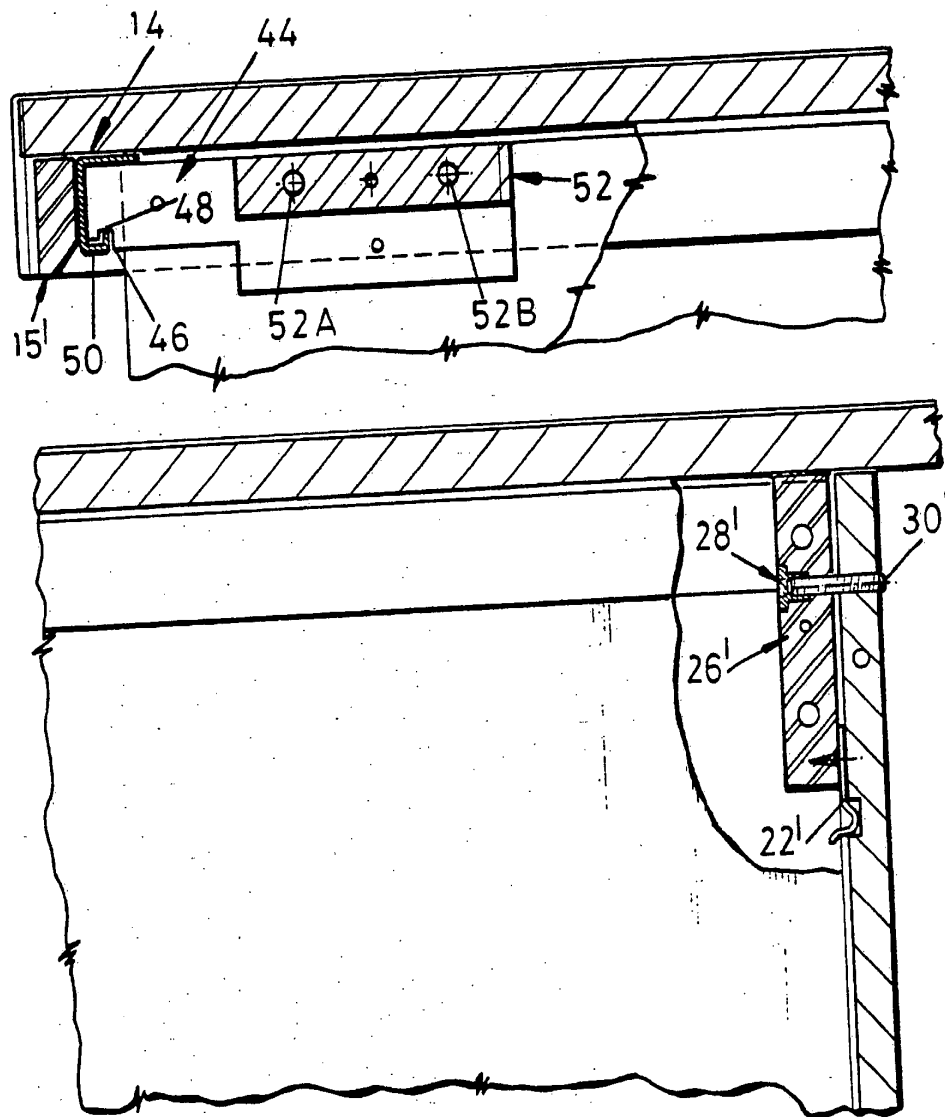


FIG. 1





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FIG. 3

Title: Desks etc.

#### DESCRIPTION

This invention relates to desks or similar furniture, particularly to provisions whereby subsidiary units, such as drawer units, are or can be associated with a basic desk unit.

Hitherto, it has become normal for desks to have subsidiary units supported by the desk top, often by screwing into the underside of the top through a part of the subsidiary unit connected to and between tops of sides of the subsidiary unit. That is usually done relative to an otherwise completed basic desk unit by turning same over for presenting a carcass of the subsidiary unit and screwing from inside the latter, often after insertion of plastic screw receivers into the desk top. This procedure is time-consuming, and it is an object of this invention to provide an advantageous alternative.

According to this invention, a basic desk unit has, below its top, a first part or parts at or inset from one (say front) edge of the top and a second part extending across the width of the desk at or inset from

an opposite (say back) edge of the top, and a subsidiary unit has a cooperating part or parts for engaging said first part or parts so that the unit can be swung up into position below the desk top and secured in place by way of said second part, 5 advantageously without any direct securement to the desk top and further preferably with the second part itself secured relative to side members of the basic desk unit, i.e. not or not wholly relative to the desk 10 top.

Such provisions can lead to much simpler assembly as subsidiary units can be installed in the basic desk unit when the latter is in its normal upright position, i.e. offered up below the desk top. Also securing in 15 this way permits load represented by a subsidiary unit to be taken by fixings extending transversely of the height of the desk/subsidiary unit.

The first part or parts, can be as or of a support rail below the front of the desk top, which is 20 a standard provision these days. Those first parts can then be as or of recessing of the front support rail, the cooperating parts of the subsidiary units being projections, which is more convenient than vice versa at least where the front support rail is already of 25 channel-section open to its rear as installed (which is

the case for our own previously preferred front support rails). A lower lip of such a rail can usefully be upturned and locally relieved to aid accurate positioning of the front of the subsidiary unit via its cooperating projections.

The cooperating part or parts of the subsidiary unit can be of any convenient type, for example including brackets attaching to sides of the subsidiary unit, in which case the free projecting ends of the brackets can conveniently be configured to latch onto a said upturned lower lip of a said front support rail. Flat plate-like such brackets can fit between sides of the subsidiary units and ends of a top front part or cross-board of that unit. An alternative if the cores of the sides of the subsidiary unit are of sufficient strength and stability is via elongate parts partially buried in holes in the thickness of those sides, say parts inclined or bent so that the holes go at an angle downwards into the sides.

The second part can be a back panel of the basic desk unit. Securement of the subsidiary unit relative to the second part, typically desk back panel, can be by a screw-threaded member or members through the thickness thereof and into the sides or a back or other receiving part of the subsidiary unit. Such screws can



be hidden behind suitable trim or left without being specifically hidden at least where the desk top has a rearward overhand.

5        Optionally, there can be provision for temporary latching of the subsidiary unit before securing it into position, say as a resilient cooperation of parts prior to further securement. Any desired catch or latch system may be used and could be of a two-part type with one part on the subsidiary unit and another on said  
10       second part of the basic desk unit, but a particularly simple system involves a spring leaf and a recess for a projecting part thereof, say with the spring lead on the subsidiary unit and the recess in said second part of the basic desk unit.

15       For framed desks it will be appreciated that the provisions hereof may be modified so that said second part of the basic desk unit is effectively replaced by cooperation between a frame part and a subsidiary unit.

20       One implementation of this invention will now be specifically described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 shows sections through a basic desk-unit for various stages A to E of fitting a subsidiary unit;

25       Figure 2 shows detail sections for location and

securement provisions of the embodiment of Figure 1;

Figure 3 shows detail sections of an alternative for location and securement provisions; and

Figure 4 shows a latch-less version of Figure 3.

5 In the drawings, referring first to Figures 1 and 2, only a top 12 with an associated front support rail 14 and a back panel 16 are shown of a basic desk unit 10. It will be appreciated that the back panel 16 will extend between sides or side frames or leg members (not shown). Also shown is a subsidiary unit 20 in outline side view broken to section at its upper rear corner to show a spring clip 22 substantially medially of its width. The subsidiary unit 20 is shown with projecting hooks 24 from each of its sides just below their upper front corners.

15 The section of the basic desk unit 10 is taken at the position of a recess 18 in the back panel 16 to accommodate a protrusive formation 22P in a portion of the clip 22 that is capable of flexing, actually shown as a suitably bent free end portion extending below an upper back part or cross-board 26 of the subsidiary unit 20.

The front support rail 14 is of generally channel section open towards the rear of the desk unit. The rail 14 is actually shown behind an elongate trim 15,

which is considered to be optional. The open side of rail 14 has an upwardly turned lower lip 14L which is locally relieved, see 14R in Figure 2, at positions for the hooks 24 at installation of the subsidiary unit 20 to the basic desk unit 10.

5 The back panel 16 of the desk unit 10 and on upper back part or cross-board 26 of the subsidiary unit 20 have holes 17 and 27, respectively, that (17) of the back panel 16 shown with a countersink and that (27) of the board 26 being shown fitted with a screw receiving nut or plug (28), and which holes register when the subsidiary unit 20 is in its installed position in the desk unit 10, for securement by a screw 30. Of Figure 1, only diagram E gives such indication, but details are in Figure 2, and there may be two or more such pairs of registering holes 17 and 27, and associated screws.

20 The hooks 24 are shown installed in sides of the subsidiary unit 20 as (see Figure 2) free ends of elongated members 24B each embedded in a downwardly inclined hole 32 made into the thickness of the unit side (20S), at least where those sides (20S) are of chipboard or similar construction and of satisfactory cone strength and stability.

25 There can, of course, be variations on the nature

of the hooks 24, say as extensions from surface-mounting or other bracket units, or as a rail spaced from the front of the subsidiary units 20; of the cooperating chip 22 and recesses 18, say as any  
 5 convenient latching arrangement; and of the securement means 30, say blind to the back panel and secured from inside the subsidiary unit 20. Important, however, to the immediate purposes of this description are the provisions of extending front hooks, an optional rear  
 10 latch arrangement, and rear securement means.

One particular form of plate-like bracket is shown in Figure 3 (upper part) at 44 relative to desk front rail 14 behind an inset trim 15'. As shown, each bracket 44 has a projected end part 46 formed with a  
 15 recess 48 just inside a nose 50 at the end, and generally shaped so as to fit snugly over the rail 14 and its lip. It is particularly neat and convenient to sandwich the plate bracket 44 between the actual side of the subsidiary unit and a top front part or  
 20 cross-board 52, for example using dowels at 54A, 54B, perhaps with a first fit via screws in other holes in the bracket plate. The rear of the embodiment of Figure 3 (lower part) differs only in minor detail relative to that of Figure 2.

25 Figure 4 is essentially similar to Figure 3 save

that first-fix latching is omitted and the final securement (28, 30) is lower.

Provisions hereof enable particularly convenient installation of subsidiary units 20 to basic desk units 10, see Figures 1A to 1E in which section hatching and detail references are omitted in diagrams B to E for clarity. Diagram A indicates that the desired subsidiary unit 20 has been selected and left, say on the floor, near or under the basic desk unit 10 and be raised (see arrow) to the installed position below the desk top 12. Diagram B shows first engagement of the subsidiary unit 20 with the desk unit 10 via the front rail lip 14L. Diagram C shows swinging of the subsidiary unit 20 about that engagement to the position in diagram D where a first-fix or temporary latching can be achieved via engagement of the clip 22 with the recess 18 if latching means is provided. Diagram E shows final securement using a screw or screws 30 through the back panel 16, conveniently into a receiving nut or plug in the subsidiary unit. Two such screw securement provisions could be spaced to each side of a single clip 22/recess 18 provision, or vice versa.

Such a system hereof lends itself to highly rationalised but flexible production of desks, say for

a wider-than-hitherto range of subsidiary units 20 and, if desired wider range of basic desk units 10, but modularised to the extent of all subsidiary units fitting all basic desk units. Replacement or switching  
5 of subsidiary units is also made particularly easy. Moreover, there is never a need to secure subsidiary units to desk tops as such.

It is to be understood and appreciated that modified systems of this invention could be provided  
10 not only as already indicated above, but further by having first engagement means at the backs of the subsidiary units, say on an extending and retracting basis to avoid fouling any back panel of the desk unit, and whether relative to a specific rail equivalent to  
15 that shown at 14 or otherwise. Then, securement would be through a front rail or trim strip (then load-bearing), which could also afford temporary latching relative to the fronts of the subsidiary units, perhaps preferably at substantially the same  
20 level as securement rather than at a different level as shown.

## CLAIMS

1. A desk unit comprising below its top, a first part or parts at or inset from one edge of the top and a second part extending across the width of the desk at or inset from an opposite edge of the top, and a subsidiary unit having a cooperating part or parts for engaging said first part or parts so that the subsidiary unit can be swung up into position below the desk top and secured in place by way of said second part.
2. A desk unit as claimed in claim 1, wherein said first part or parts are as or of a support rail below the front of the desk top.
3. A desk unit as claimed in claim 1, wherein said first parts are as or of recessing of a support rail below the front of the desk top.
4. A desk unit according to any preceding claim, wherein the cooperating parts of the subsidiary units are projections.
5. A desk unit as claimed in claim 4, wherein said cooperating part or parts are elongate and partially buried in holes in the thickness of the sides of the subsidiary unit.

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